



ABSTRACT

A method for treatment of neurodegenerative disease conditions stemming from multiple sclerosis, aging, autoimmune diseases and fibromyalgia. A compound effective to increase neuronal metabolism of histamine to a histamine H₂ agonist is administered in an amount sufficient to stimulate production of cyclic AMP at a level which is sufficient to maintain myelin against undergoing self-degeneration. The compound is selected from the group consisting of histamine M-methyltransferase, monoamineoxidase-A, monoamineoxidase-A agonists and histamine H₃ antagonists. The histamine M-methyltransferase may be administered to increase neuronal metabolism of histamine to tele-methylhistamine, whereas the monoamineoxidase-A or monoamineoxidase-A agonist may be administered so as to increase neuronal metabolism of telemethylhistamine to an H₂ agonist. Separately or in conjunction with the others, the histamine H₃ antagonist may be administered so as to inhibit metabolism of the telemethylhistamine to an H₃ agonist, thereby increasing metabolism of the telemethylhistamine to an H₂ agonist. The increased histamine H₂ agonist levels reduce demyelination and the symptoms that are associated with these conditions.